



## CLAIMS

Claim 1. (Original) A method for manufacturing a compound semiconductor optoelectronic device comprising steps of:

- forming an optoelectronic device epitaxial wafer, said optoelectronic device epitaxial wafer containing a V-shaped pit due to threading dislocation;
- forming an insulated isolation material in said V-shaped pit of said optoelectronic device epitaxial wafer; and
- forming an electrode layer on said optoelectronic device epitaxial wafer having said insulated isolation material in said V-shaped pit for completing said optoelectronic device.

Claim 2. (Original) The method according to Claim 1 wherein said optoelectronic device epitaxial wafer includes an  $\text{Al}_2\text{O}_3$  substrate, a n-GaN (Gallium-Nitride) layer, a MQW (Multi-Quantum-Well) layer, a p-AlGaN layer and a p-GaN layer.

Claim 3. (Original) The method according to Claim 1 wherein forming said insulated isolation material comprises steps of:

- forming said insulated isolation material layer on said V-shaped surface; and
- removing said insulated isolation material layer but leaving said insulated isolation material in said V-shaped pit.

Claim 4. (Original) The method according to Claim 3 wherein forming said insulated isolation material layer is by

deposition.

Claim 5. (Original) The method according to Claim 4 wherein removing said insulated isolation material layer is by polishing.

Claim 6. (Original) The method according to Claim 4 wherein removing said insulated isolation material layer is by etching.

Claim 7. (Original) The method according to Claim 4 wherein removing said insulated isolation material layer is by reactive ion etching and said optoelectronic epitaxial wafer is inclined.

Claim 8. (Original) The method according to Claim 3 wherein forming said insulated isolation material layer is by coating an organic material.

Claims 9-15. Cancelled.